

## VIEWPOINT

# Salvaging the History, Physical Examination and Doctor-Patient Relationship in a Technological Cardiology Environment

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The rapid growth of quantitative cardiovascular technologies has had a profound effect on the activities of cardiologists. Whereas the evaluation of a patient for cardiovascular disease in the past involved an extensive history and physical examination, usually buttressed by an electrocardiogram and a few other carefully chosen tests, it is not uncommon these days for the history and physical examination to be performed as a perfunctory prelude to extensive noninvasive or invasive technological evaluation.

The precision with which technology can characterize cardiac and vascular structure and function has revolutionized cardiologic practice. But has patient care been compromised by the substitution of technology for the traditional doctor-patient relationship? Are some cardiologists losing their skill at interpreting the history and physical examination and at developing a caring relationship with their patients?

Financial considerations have certainly contributed to the new style of cardiologic practice. Reimbursement for procedures has fueled the income of cardiologists in recent years, and the burden to see large numbers of clinic patients in the shortest possible time has deprived the physician of the luxury of a leisurely history and examination. Algorithms describing consensus-developed clinical pathways often have replaced the judgment of a cardiologist and have led many health care systems to the mistaken conclusion that a primary care practitioner can deal with complex disease states less expensively than a specialist. Increasingly, the cardiologist has been relegated to a near-technical role to carry out the procedure for which the patient was referred.

Does the system suffer because of a less than insightful doctor-patient relationship? How often have we seen patients hospitalized and referred for coronary angiography when a five minute interview makes it clear that the patient's symptoms were not related to myocardial ischemia? How often have patients been exposed to an interventional procedure for a coronary lesion that was not causing their symptoms? How often has a causal physical examination

missed the jugular venous distention that is a marker for cardiac dysfunction and the need for therapy? How many patients have had cardiac evaluation and left our health care facilities confused about what was done, what is wrong with them and what they should do about it? The absence of a thoughtful discussion with a knowledgeable physician is at the root of the latter problem.

Contemporary technology hardly provides all the answers that many hope for. Echocardiography is a remarkable tool to evaluate structure and function of the heart. Centers of excellence provide skilled performance, skilled training in the methodology and innovative development of newer techniques. But in the practice of cardiology, echos are often interpreted by less-skilled technicians, and the recordings are not always adequately performed. We have all seen patients in whom an improperly interpreted echocardiogram has launched an inappropriate work up and management. Angiography provides critical data for decisions regarding interventions to reperfuse the coronary arteries, but some angiographers confine their view of disease to what the catheter reveals. The absence of significant obstruction then becomes the end of the story, although the patient may still be left with the symptoms that initially brought him or her to the cardiologist. A broader view of the doctor-patient relationship is required.

The problem is to retain the quantitation brought by well-performed technology while restoring the judgment, balance and insight unique to the thoughtful physician-patient interaction. In some parts of the world, the health care system is working against this solution. Young cardiology trainees are far more interested in gaining expertise in techniques than dedicating time to history-taking and communication. Careful palpation of the radial or femoral arteries can reveal more about stroke volume, outflow obstruction or valve insufficiency than most trainees realize. Most physicians do not routinely perform ophthalmoscopic examination in a hypertensive, even though it may be the best way to evaluate the state of the small arteries. Auscultation is often reduced to a cursory activity. Careful palpation of the apical impulse may be shunned in exchange for an echocardiogram, even though the character of the apical impulse may tell more about the presence of left ventricular hypertrophy than an absolute wall thickness measured without knowing what the normal wall thickness should be

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Manuscript received September 9, 1998; accepted October 28, 1998.

in that particular patient. Furthermore, the apical impulse is a remarkably sensitive guide to the presence of left ventricular chamber dilation.

Knowledgeable use of drugs to treat hypertension or heart failure is a talent that evolves from time-consuming observation and experience. Many interventional cardiologists have little interest in obtaining the skill, because their time can be better spent in refining their technical ability. Furthermore, interventional cardiologists are likely to seek an interventional solution to a cardiac problem that may well be better treated "conservatively." Alternatively, noninvasive cardiologists may be more likely to seek a medical solution to a problem that may be better treated invasively.

There is no simple solution to the growing disparity in talents and biases between the cardiologist who is a skilled technician and the one who is a knowledgeable cognitive specialist. Maintenance of optimal patient care in a technological environment will require different strategies in different health care environments. Because of differences in training and orientation, it is unlikely that technology-oriented and cognitive-oriented cardiologists will always approach the patient and his or her treatment in the same

way. We must therefore consider evolving into a more dual-specialty profession. Ideally, the patient would be under the eclectic decision-making care of the cognitive specialist, and would use the services of the technology specialist when needed. Rather than turning the cognitive aspects of heart disease over to a primary care physician, we need to emphasize that cognitive skills are as important and difficult to master as technical skills. We need to emphasize this skill development in our training programs and convince young cardiologists to take it seriously. Simultaneously, we must work to teach our health management organizations that care provided by these individuals can save money and that it is worth every bit as much as that provided by the technologists whose product is currently valued more highly.

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